



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,588

04/21/2006

Kunio Gobara

MAT-8844US

7276

52473

7590

04/22/2010

RATNERPRESTIA

P.O. BOX 980

VALLEY FORGE, PA 19482

EXAMINER

NICKERSON, JEFFREY L

ART UNIT

PAPER NUMBER

2442

MAIL DATE

DELIVERY MODE

04/22/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/576,588	<b>Applicant(s)</b> GOBARA ET AL.	
	<b>Examiner</b> JEFFREY NICKERSON	<b>Art Unit</b> 2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 89-128 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 89-128 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This communication is in response to Application No. 10/576,588 filed nationally on 21 April 2006 and internationally on 29 October 2004. The preliminary amendments filed on 21 April 2006 and 14 February 2007, which cancel claims 1-88, add claims 89-128, and amend the specification, are hereby acknowledged. Claims 89-128 are currently pending and have been examined.

### ***Election/Restrictions***

#### **REQUIREMENT FOR UNITY OF INVENTION**

2. As provided in 37 CFR 1.475(a), a national stage application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention"). Where a group of inventions is claimed in a national stage application, the requirement of unity of invention shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

The determination whether a group of inventions is so linked as to form a single general inventive concept shall be made without regard to whether the inventions are claimed in separate claims or as alternatives within a single claim. See 37 CFR 1.475(e).

#### WHEN CLAIMS ARE DIRECTED TO MULTIPLE CATEGORIES OF INVENTIONS

As provided in 37 CFR 1.475(b), a national stage application containing claims to different categories of invention will be considered to have unity of invention if the claims are drawn only to one of the following combinations of categories:

- (1) A product and a process specially adapted for the manufacture of said product; or
- (2) A product and process of use of said product; or
- (3) A product, a process specially adapted for the manufacture of the said product, and a use of the said product; or
- (4) A process and an apparatus or means specifically designed for carrying out the said process; or
- (5) A product, a process specially adapted for the manufacture of the said product, and an apparatus or means specifically designed for carrying out the said process.

Otherwise, unity of invention might not be present. See 37 CFR 1.475(c).

Art Unit: 2442

3. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

a. Group I, claim(s) 89-93, 113-116, 126-128 drawn to a system (and the server within) for NAT port prediction using bubble packets, whereby the bubble packet port detector and transmitter reside on the server.

b. Group II, claim(s) 94-99, 100-109, 117, 118-123, drawn to a system (and first information processor within; server within; and method of a first info. Processor within) for NAT port prediction using bubble packets, whereby the bubble packet port detector and transmitter reside on the first information processor.

c. Group III, claim(s) 110-112 and 124-125, drawn to a second information processor and a method of a second information processor.

The groups of inventions listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Art Unit: 2442

Group I contains common features found within that of Group II. However, the common features found between these two groups are found within the prior art, as indicated below, and thus are deemed to lack unity evident *a posteriori*.

Group I contains common features found within that of Group III. However, the common features found between these two groups are found within the prior art, as indicated below, and thus are deemed to lack unity evident *a posteriori*.

Group II contains common features found within that of Group III. However, the common features found between these two groups are found within the prior art, as indicated below, and thus are deemed to lack unity evident *a posteriori*.

Takeda (US 2004/0139228 A1) teaches a communication system (Figure 15A-15D) comprising a first information processor (host/cam 629), a second information processor (client/browser 630), a first communication control unit for controlling the communication of the first information processor (NAT 1502), a second communication control unit for controlling the communication of the second information processor (NAT 1504), and a server for establishing communication between the first and second information processors (STUN server 622); wherein

A first information processor (Figure 15A, item 629) includes:

a reference port receiver for receiving reference port information showing the position of the reference port, a port in the second communication control unit, that is a

Art Unit: 2442

reference for transmission of a bubble packet transmitted for leaving transmission record in the first communication unit (Takeda: Figure 15a, 1508; [0184] server receives NAT address/port pair mapping and NAT type of the client 630 via STUN server);

a bubble packet transmitter for transmitting the bubble packet to the second comm. control unit via the first comm. control unit in accordance with the reference port information (Takeda: Figure 15B, step 1510-1516 breakout packets; [0185]);

a detection packet transmitter for transmitting a port detection packet to the server in order to detect the position of bubble packet transmitting port, a port of the first communication control unit, which is used in transmission of the bubble packet (Figure 15A, step 1507A; [0184]-[0187]);

a reply packet receiver for receiving a reply packet transmitted from the second information processor via the second communication control unit to the bubble packet transmitting port (Figure 15C, 1517; [0187]-[0188] for receiving back reply).

A second information processor (Figure 15A, item 629) includes:

a reference port detection packet transmitter for transmitting a reference port detection packet for detecting the position of the reference port (Figure 15A, 1507A; [0184] for sending NAT detector packet);

a bubble packet transmitting port information receiver for receiving bubble packet transmitting port information showing the position of the bubble packet transmitting port (Figure 15B, 1510-1516; [0185] for receiving breakout packets);

Art Unit: 2442

a reply packet transmitter for transmitting a reply packet to the bubble packet transmitting port showing the bubble packet transmitting port information (Figure 15C, 1518; [0187]-[0188] for sending breakout reply);

A server (Figure 15a, item 622) includes:

a reference port detector which receives the reference port detection packet transmitted from the second information processor for detecting the position of the reference port in accordance with the reference port detection packet (Figure 15A, 1507B; [0183]-[0184] server receives packets and identifies NAT types and port/address pairs); and

a reference port transmitter for transmitting reference port information showing the position of the reference port detected by the reference port detector to the first information processor (Figure 15A, 1508-1509; [0183]-[0184] NAT types and address/port pairs are exchanged via the STUN server).



Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To preserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention or species.

Should applicant traverse on the ground that the inventions have unity of invention (37 CFR 1.475(a)), applicant must provide reasons in support thereof. Applicant may submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. Where such evidence or admission is provided by applicant, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY NICKERSON whose telephone number is (571)270-3631. The examiner can normally be reached on M-Th, 9:00am - 7:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Philip Lee can be reached on (571)272-3967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. N./  
Examiner, Art Unit 2442

/Philip C Lee/  
Primary Examiner, Art Unit 2448